FRAMEWORK AGREEMENT

BETWEEN

THE GOVERNMENT OF THE UNITED STATES OF AMERICA

AND

THE GOVERNMENT OF CANADA

FOR COOPERATION

IN THE EXPLORATION AND USE

OF OUTER SPACE FOR PEACEFUL PURPOSES

THE GOVERNMENT OF THE UNITED STATES OF AMERICA and THE GOVERNMENT OF CANADA, hereinafter referred to as the "Parties",

RECOGNIZING a mutual interest in the exploration and use of outer space for peaceful purposes;

CONSIDERING the desirability of enhanced cooperation between the Parties in human space flight, space science and exploration, Earth science, civil aeronautics research and other activities;

CONSIDERING the respective interests of the Parties in the potential for commercial applications of space technologies for the benefit of the peoples of both countries;

RECALLING their long and fruitful cooperation since 1959 in the exploration and peaceful use of outer space, through the successful implementation of cooperative activities in a broad range of space science and applications areas;

RECALLING the Agreement among the Government of Canada, Governments of Member States of the European Space Agency, the Government of Japan, the Government of the Russian Federation and the Government of the United States of America concerning Cooperation on the Civil International Space Station, done at Washington on 29 January 1998 (hereinafter referred to as the "IGA");

RECALLING the Exchange of Notes constituting an Agreement between the

Government of the United States of America and the Government of Canada on the

Allocation of Intellectual Property Rights, Interests and Royalties for Intellectual

Property Created or Furnished Under Certain Scientific and Technological Cooperative

Research Activities, done at Ottawa on 4 February 1997 (hereinafter referred to as the

"Agreement on Intellectual Property"); and

DESIRING to establish an overall legal framework to facilitate the conclusion of implementing arrangements for cooperation between Agencies of the two Governments;

HAVE AGREED as follows:

ARTICLE 1

Purpose

This Agreement sets forth the obligations, terms and conditions for the cooperation between the National Aeronautics and Space Administration (NASA) and the Canadian Space Agency (CSA), or any other designated Agency of either Party, in the exploration and use of outer space for peaceful purposes in areas of common interest and on the basis of equality and mutual benefit.

Definitions

For the purposes of this Agreement,

"Agency" means:

- (i) for the Government of Canada, the CSA, or any other Canadian agency or department that the Government of Canada may decide to designate in writing through diplomatic channels; and
- (ii) for the Government of the United States of America, NASA, or any other U.S. agency or department that the Government of the United States of America may decide to designate in writing through diplomatic channels; and

"Related Entity" means:

- (i) a contractor, subcontractor, cooperating entity or sponsored entity of an Agency, at any tier;
- (ii) a user or customer of an Agency, at any tier; or
- (iii) a contractor or subcontractor of a user, customer, cooperating entity or sponsored entity of an Agency, at any tier.

The term "Related Entity" may apply to a State, an international organization, or an agency, department or institution of a State, having the same relationship to an Agency as described in subparagraphs (i) to (iii) above or otherwise engaged in the implementation of Protected Space Operations as defined in subparagraph 2(d) of Article 11 below.

Contractors and subcontractors include suppliers of any kind.

Scope of Cooperation

1. The Parties may develop joint activit		Parties may develop joint activities in the following areas of cooperation:
	(a)	Space exploration;
	(b)	Space operations, including human space flight;
	(c)	Earth and space science;
	(d)	Civil aeronautics research, as it applies to space; and
	(e)	Other relevant areas of mutual interest jointly decided in writing by the Parties.
2.	The joint activities may involve:	
	(a)	Spacecraft and space research platforms;
	(b)	Scientific instruments onboard spacecraft and space research platforms;
	(c)	Space operations missions, including human space flight activities;
	(d)	Sounding rocket and scientific balloon flights and campaigns;
	(e)	Aircraft flights and campaigns;
	(f)	Space communications, including ground-based antennas for tracking, telemetry and command, and data acquisition;
	(g)	Ground-based space research facilities;
	(h)	Exchanges of scientific personnel;

- (i) Exchanges of scientific data, knowledge and experience;
- (j) Terrestrial analogs and undersea facilities;
- (k) Education and public outreach activities;
- (1) Space systems applications; and
- (m) Other activities of mutual interest jointly decided in writing by the Parties.
- 3. These joint activities may take place on Earth, in air space, or in outer space.
- 4. This Agreement shall not apply to activities undertaken pursuant to the IGA or any subsequent agreement that amends, modifies, or is concluded pursuant to the IGA.

Implementing Arrangements

- 1. Subject to their respective laws and regulations, the Parties shall conduct joint activities under this Agreement through their respective Agencies. Implementing arrangements concluded by the Agencies shall set forth the specific roles and commitments of the Agencies and shall include, as appropriate, provisions related to the nature and scope of the joint activities, the individual and joint commitments of the Agencies, and any other provisions necessary to conduct the joint activities.
- 2. The implementing arrangements shall refer to and be subject to this Agreement. In case of an inconsistency between this Agreement and an implementing arrangement, this Agreement shall prevail.
- 3. The Parties shall ensure that their respective Agencies make all reasonable efforts to perform the commitments contained in the implementing arrangements.
- 4. The Parties agree that the implementing arrangements shall not create rights and obligations under international law.

Funding

- 1. The Parties shall be responsible for funding their respective activities under this Agreement or any implementing arrangement hereunder, subject to the availability of appropriated funds. The Parties intend that the activities will be performed on a cooperative basis involving no exchange of funds.
- 2. Each Party shall ensure that, should its Agency encounter funding problems that may affect the activities to be carried out pursuant to this Agreement, its Agency will notify and consult with the other Agency as soon as possible.

ARTICLE 6

Customs Duties and Taxes

On a reciprocal basis, each Party shall use reasonable efforts to arrange, in accordance with its laws and regulations, free customs clearance and waiver of all applicable duties and taxes for the import or export of equipment and related goods necessary to carry out activities under implementing arrangements. In the event that any customs fees or taxes of any kind are nonetheless levied on such equipment and related goods, such customs fees or taxes shall be borne by the Party levying such fees or taxes.

ARTICLE 7

Entry and Exit of Personnel

On a reciprocal basis, each Party shall use reasonable efforts to facilitate, in accordance with its laws and regulations, the entry to and exit from its territory of personnel engaged in joint activities pursuant to this Agreement.

Overflight

On a reciprocal basis, each Party shall facilitate, upon request from the other Party, and in accordance with its laws, regulations and practice, the provision of overflight clearances as necessary in order to carry out activities under implementing arrangements. Detailed information regarding the purpose of the overflights, the proposed type of equipment to be used, and the researchers involved shall be addressed, as appropriate, in the implementing arrangements.

ARTICLE 9

Intellectual Property Rights

Intellectual property rights created as a result of cooperation pursuant to this

Agreement shall not be allocated as set out in the Agreement on Intellectual Property, but
shall be allocated in accordance with the provisions below:

(a) Patents

- (i) Nothing in this Agreement shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any inventions of a Party or its Agency's Related Entities made prior to the entry into force of, or outside the scope of, this Agreement, including any patents or other forms of protection, in any country, corresponding to such inventions.
- (ii) Any rights to, or interest in, any invention resulting from activities undertaken in performance of this Agreement solely by either Party or any of its Agency's Related Entities, including any patents or other forms of protection, in any country, corresponding to such invention, shall be owned by such Party or, subject to subparagraph (a)(iv) of this Article, such Related Entity.

- (iii) It is not anticipated that there will be any joint inventions as a result of activities undertaken in performance of this Agreement. Nevertheless, in the event that an invention is jointly made by the Parties and/or their Agencies' Related Entities in the performance of this Agreement, the Parties shall, in good faith, consult and agree as to:
 - (A) the allocation of rights to, or interest in, such joint invention, including any patents or other forms of protection, in any country, corresponding to such joint invention;
 - (B) the responsibilities, costs, and actions to be taken to establish and maintain patents or other forms of protection, in any country, for each such joint invention; and
 - (C) the terms and conditions of any license or other rights to be exchanged between the Parties or granted by one Party to the other Party.
- (iv) With respect to any invention created in the performance of this Agreement and involving a Related Entity, allocation of rights between a Party and its Agency's Related Entity to such invention, including any patents or other forms of protection, in any country, corresponding to such invention, shall be determined by such Party's laws, regulations, and applicable contractual obligations.

(b) Copyrights

(i) Nothing in this Agreement shall be construed as granting, either expressly or by implication, to the other Party any rights to, or interest in, any copyrights of a Party or its Agency's Related Entities created prior to the entry into force of, or outside the scope of, this Agreement.

- (ii) Any copyrights in works created solely by either Party or any of its Agency's Related Entities, as a result of activities undertaken in performance of this Agreement, shall be owned by such Party or Related Entity. Allocation of rights between such Party and its Agency's Related Entities to such copyrights shall be determined by such Party's laws, regulations, and applicable contractual obligations.
- (iii) For any work jointly authored by the Parties and/or their Agencies' Related Entities, should the Parties decide to register the copyright in such work, they shall, in good faith, consult and agree as to the responsibilities, costs, and actions to be taken to register copyrights and maintain copyright protection, in any country.
- (iv) Subject to the provisions of Articles 10 and 12 (concerning Transfer of Goods and Technical Data, and Publication of Public Information and Results), each Party shall have an irrevocable, royalty-free right to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, and authorize others to do so on its behalf, any copyrighted work resulting from activities undertaken in the performance of this Agreement for its own purposes, regardless of whether the work was created solely by, or on behalf of, the other Party or jointly with the other Party, and without consulting with or accounting to the other Party.

Transfer of Goods and Technical Data

- 1. Each Party shall ensure that its Agency transfer only those technical data (including software) and goods necessary to fulfill their respective responsibilities under this Agreement, in accordance with the following provisions, notwithstanding any other provisions of this Agreement:
 - (a) All activities under this Agreement shall be carried out in accordance with the Parties' respective national laws and regulations, including their export control laws and regulations and those pertaining to the control of classified information;
 - (b) The transfer of technical data as described in an implementing arrangement, with regard to interface, integration, and safety shall normally be made without restriction, except as required in subparagraph 1(a) above;
 - (c) All transfers of goods, proprietary data, and export-controlled technical data are subject to the following provisions:
 - (i) Each Party shall ensure that, in the event its Agency or its Agency's Related Entity finds it necessary to transfer goods, proprietary data, or export-controlled technical data, for which protection is to be maintained, such goods shall be specifically identified and such proprietary data or export-controlled technical data shall be marked;

- (ii) Such identification for goods and such marking of proprietary data or export-controlled technical data shall indicate that the goods, proprietary data, and export-controlled technical data are to be used by the receiving Agency or Related Entity only for the purposes of fulfilling the receiving Agency's commitments under an implementing arrangement or a Related Entity's responsibilities under a contract made pursuant to this Agreement, and that the identified goods and marked proprietary data or marked export-controlled technical data are not to be disclosed or retransferred to any other entity without the prior written permission of the furnishing Agency or Related Entity;
- (iii) The Party of the receiving Agency or receiving Related Entity shall ensure that its Agency or Related Entity abide by the terms of the notice and protect any such identified goods and marked proprietary data or marked export-controlled technical data from unauthorized use and disclosure; and
- (iv) Each Party shall ensure that its Agency cause its Related Entity to be bound by the provisions of this Article related to use, disclosure, and retransfer of goods and proprietary data and export-controlled technical data through contractual mechanisms or equivalent measures.
- 2. The Party of the receiving Agency or receiving Related Entity shall ensure that the receiving Agency and the Related Entity use all goods, proprietary data, or export-controlled technical data, transferred in accordance with any implementing arrangement, exclusively for the purposes of the implementing arrangement under which such goods, proprietary data, or export-controlled technical data were transferred. Upon completion of the activities under that implementing arrangement, such Party shall ensure that the receiving Agency and the Related Entity return or, at the request of the furnishing Agency or its Related Entity, otherwise dispose of all goods and marked proprietary data or marked export-controlled technical data provided under that implementing arrangement, as directed by the furnishing Agency or Related Entity.

Cross-Waiver of Liability

1. V	With respect to activities performed under this Agreement, the Parties agree that a
compreh	ensive cross-waiver of liability will further cooperation in the exploration and
use of or	iter space. This cross-waiver of liability, as set out below, shall be broadly
construe	d to achieve this objective.

- 2. As used in this Article:
 - (a) The term "Damage" means:
 - (i) bodily injury to, or other impairment of health of, or death of, any person;
 - (ii) damage to, loss of, or loss of use of any property;
 - (iii) loss of revenue or profits; or
 - (iv) other direct, indirect, or consequential damage;
 - (b) The term "Launch Vehicle" means an object or any part thereof intended for launch, launched from Earth into air space or outer space, or returning to Earth, which carries Payloads or persons, or both;
 - (c) The term "Payload" means all property to be flown or used on or in a Launch Vehicle;

- (d) The term "Protected Space Operations" means all activities pursuant to this Agreement, or any implementing arrangement concluded hereunder, including Launch Vehicle activities and Payload activities on Earth, in outer space, or in transit between Earth and air space or outer space, in implementation of this Agreement. Protected Space Operations begin on the date of entry into force of this Agreement and end when all activities done in implementation of this Agreement are completed. The term "Protected Space Operations" includes, but is not limited to:
 - research, design, development, test, manufacture, assembly, integration, operation, or use of Launch or transfer Vehicles,
 Payloads, or instruments, as well as related support equipment and facilities and services; and
 - (ii) all activities related to ground support, test, training, simulation, or guidance and control equipment and related facilities or services.

The term "Protected Space Operations" excludes activities on Earth that are conducted on return from space to develop further a Payload's product or process for use other than for activities in implementation of this Agreement.

- 3. (a) Each Party agrees to a cross-waiver of liability pursuant to which each Party waives all claims against any of the entities or persons listed in subparagraphs 3(a)(i) through 3(a)(iii) below based on Damage arising out of Protected Space Operations. This cross-waiver shall apply only if the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations. The cross-waiver shall apply to any claims for Damage, whatever the legal basis for such claims, against:
 - (i) the other Party;

- (ii) a Related Entity of the other Party's Agency; and
- (iii) the employees of any of the entities identified in subparagraphs (i) and (ii) immediately above.
- (b) In addition, each Party shall ensure that its Agency extend the cross-waiver of liability as set forth in subparagraph 3(a) above to its Related Entities by requiring them, by contract or otherwise, to agree to:
 - (i) waive all claims against the entities or persons identified in subparagraphs 3(a)(i) through 3(a)(iii) above; and
 - (ii) require that their Related Entities waive all claims against the entities or persons identified in subparagraphs 3(a)(i) through 3(a)(iii) above.
- (c) For avoidance of doubt, this cross-waiver of liability shall be applicable to claims arising from the Convention on International Liability for Damage Caused by Space Objects, done on 29 March 1972 (the "Liability Convention"), where the person, entity, or property causing the Damage is involved in Protected Space Operations and the person, entity, or property damaged is damaged by virtue of its involvement in Protected Space Operations.
- (d) Notwithstanding the other provisions of this Article, this cross-waiver of liability shall not be applicable to:
 - (i) claims between an Agency and its Related Entity or between an Agency's Related Entities;
 - (ii) claims made by a natural person, his/her estate, survivors, or subrogees for bodily injury, other impairment of health or death of such natural person, except where a subrogee is a Party or is otherwise bound by the terms of this cross-waiver;
 - (iii) claims for Damage caused by willful misconduct;

- (iv) intellectual property claims;
- (v) claims for Damage resulting from a failure to ensure that the crosswaiver of liability is extended as set forth in subparagraph 3(b) of Article 11; or
- (vi) claims by or against an Agency or its Related Entity arising out of or relating to the other Agency's or its Related Entity's failure to meet its contractual obligations, pursuant to express contractual provisions.
- (e) Nothing in this Article shall be construed to create the basis for a claim or suit where none would otherwise exist.
- (f) In the event of third-party claims for which the Parties may be liable, the Parties shall consult promptly to determine an appropriate and equitable apportionment of any potential liability and on the defence of any such claims.

Publication of Public Information and Results

- 1. The Parties shall retain the right to release public information regarding their own activities under this Agreement. The Parties shall coordinate with each other in advance concerning releasing to the public information that relates to the other Party's responsibilities or performance under this Agreement.
- 2. (a) The Parties shall make the final results obtained from joint activities available to the general scientific community through publication in appropriate journals or by presentations at scientific conferences as soon as possible and in a manner consistent with good scientific practices.
 - (b) Each Party shall ensure that its Agency include provisions for sharing of science data in the implementing arrangements.

3. The Parties acknowledge that the following data or information does not constitute public information and that such data or information shall not be included in any publication or presentation by a Party under this Article without the other Party's prior written permission: (a) data furnished by the other Party in accordance with Article 10 (concerning Transfer of Goods and Technical Data) of this Agreement which is export-controlled, classified or proprietary; or (b) information about an invention of the other Party before a patent application has been filed covering the same, or a decision not to file has been made.

ARTICLE 13

Registration of Space Objects

The Parties shall ensure that, for implementing arrangements involving a launch, their Agencies decide as to which will request its Government to register the spacecraft as a space object in accordance with the *Convention on Registration of Objects Launched into Outer Space* of 12 November 1974. Registration pursuant to this Article shall not affect the rights or obligations of either Party under the Liability Convention.

ARTICLE 14

Consultations

- 1. The Parties shall encourage their Agencies to consult, as necessary and appropriate, to review the implementation of joint activities conducted in accordance with this Agreement and to exchange views on potential areas of future cooperation and to discuss any issue relating to any implementing arrangement.
- 2. In the event questions arise regarding the implementation of joint activities conducted in accordance with an implementing arrangement, the Agencies will endeavor to resolve the question through consultations.
- 3. Failing resolution of a question at the Agency level, such question shall be dealt with in accordance with Article 15.

Dispute Settlement

The Parties shall endeavor to settle disputes relating to the interpretation or implementation of this Agreement through consultations and negotiations.

ARTICLE 16

Existing Rights and Obligations

This Agreement shall not affect the rights and obligations of the Parties under other international agreements to which they are party.

ARTICLE 17

List of Implementing Arrangements

- 1. The Parties shall establish and maintain a List of implementing arrangements which are subject to this Agreement.
- 2. This List shall take the form of a written exchange between the Parties and include information such as the title of each implementing arrangement, the date on which it is signed and its duration, as well as the type of cooperation to be carried out under each implementing arrangement. The Parties shall update the List at least yearly, within 60 days following the last day of each calendar year, unless no implementing arrangements were signed or discontinued during that year.
- 3. This List shall not constitute an integral part of this Agreement.

Entry into Force and Duration

This Agreement shall enter into force on the date of the last note of an exchange of diplomatic notes in which the Parties notify each other of the completion of their internal procedures necessary for the entry into force of this Agreement. It shall remain in force for ten (10) years unless terminated in accordance with the provisions of Article 20.

ARTICLE 19

Amendments

The Parties may amend this Agreement by mutual written agreement.

ARTICLE 20

Termination

- 1. Either Party may terminate this Agreement at any time by providing at least six months written notice to the other Party.
- 2. Notwithstanding the termination or expiration of this Agreement, its provisions shall continue to apply to cooperation under any implementing arrangements in effect at the time of this Agreement's termination or expiration, for the duration of such implementing arrangements.

Termination or expiration of this Agreement shall not affect the Parties'
continuing obligations under this Agreement with regards to Intellectual Property Rights,
Transfer of Goods and Technical Data, and Cross-Waiver of Liability.

IN WITNESS WHEREOF, the undersigned, being duly authorized by their respective Governments, have signed this Agreement.

DONE at Washington, in duplicate, this ninth day of September 2009, in the English and French languages, both versions being equally authentic.

FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA

FOR THE GOVERNMENT

OF CANADA